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Community Development in a Tourism Context; A Sociological Perspective

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Abstract

To assess the psychometric properties of the SPCS-T, a CFA (Confirmatory Factor Analysis) was utilized. Harrington asserts that the CFA can examine the construct validity of a scale and assess its consistency or invariance across different groups, populations, or time. Additionally, she explains that the CFA can evaluate the extent to which a hypothesized construct can be identified in a new sample. One major similarity between EFA (Exploratory Factor Analysis) and CFA is that they both identify the factor structure that explains the variation and covariation among a series of observed variables. However, while EFA establishes a primary model that fits the data, CFA confirms the fit of that data and tests the validity of a pre-determined model.

Introduction

We conducted a CFA using maximum likelihood estimation on the remaining 16 items of the SPCS-T. The software used for analysis was AMOS 19.0, which allowed us to assess the overall model fit of the SPCS-T. Several statistical indicators were generated to evaluate the model's fit.

The first indicator is the ratio of chi-square (χ^2) divided by the degrees of freedom (df), denoted as CMIN/DF. Carmines and McIver (1981, p. 80) suggest that a ratio within the range of 2 to 1 indicates an adequate fit between the hypothetical model and the sample data.

Another indicator is the goodness of fit index (GFI), developed by Jöreskog and Sörbom (1984), which ranges from 0 to 1. A GFI value of 1 indicates a perfect fit of the model to the data.

The Tucker-Lewis index (TLI), representing the non-normalized fit index (NNFI), is used in the context of analysis of moment structures (Hoe, 2008). Similarly, the comparative fit index (CFI) measures the relative noncentrality index (RNI) by comparing the fit of the target model with that of an independence model (Schilling, 2002). Higher values for both TLI and CFI, closer to 1, indicate a better fit.

The root mean square error of approximation (RMSEA) assesses the degree to which the analyzed data approximates the population covariance matrix (Raykov, 2008). Browne and Cudeck (1993) suggest that an RMSEA value of less than 0.05 indicates a close fit of the model in terms of the degrees of freedom.

Table 3 displays the proposed CFA goodness-of-fit indices and their respective ranges for this study. Results of the CFA showed that the hypothetical measurement model fit the data (Table 3). Even though the LC and TPC scales were hypothesized as independent, they were allowed to correlate. The Chi-square value for the overall model was significant, $\chi^2 (103) = 389.79$, $p < 0.001$ suggesting good model fit. Other indices also showed acceptable model fit with CMIN/DF=3.784, GFI=0.942, TLI=0.932, and CFI=0.942. Thus, all of the model fit indices met the recommended fit values in Table 3 except for RMSEA.

Modification indices suggested freeing the covariance between two error terms in order to improve model fit (Yoon & Uysal, 2005). The study, therefore, re-conducted the CFA after employing the modification indices; as a result, a subsequent model was found to have better fit than the constrained model, $\chi^2 (84) = 146.49$, $p < 0.001$, CMIN/DF=1.744, GFI=0.951,

TLI=0.982, CFI=0.987, and RMSEA=0.046. Given the significant improvement in overall model fit, allowing the two error terms to covary was considered the better model.

The composite reliability test examines the internal consistency of the SPCS. The composite reliability of the two scales ranged from 0.955 (LC) and 0.950 (TPC), which indicated a good internal consistency in the model (>0.70 , Kline, 2005). Average variance extracted (AVE) was utilized to test discriminant validity that the two subscales, LC and TPC, are pure measures of discrete traits (Thronkide & Thronkide-Christ, 2010). The AVE of the two constructs exceeded the recommended standard 0.50 (Table 4). Lastly, standardized factor loadings for items ranged from 0.692 to 0.883 (Table 4). The ideal factor loading is greater than 0.70 (Fornell & Larcker, 1981), but recent studies suggest that at least 0.50 for standardized factor loadings is generally acceptable (Dimitrov, 2012; Kline, 2005; Woosnam & Norman, 2012).

Since the rise in importance of community-based and sustainable tourism practices, citizen participation and empowerment have become significant areas of study in tourism research.

Active and voluntary citizen participation enhances policy control and leadership competence, which are two key ingredients of psychological empowerment. Psychologically empowered individuals can contribute to the development of creative solutions in policy-making processes, including local tourism development. The sociopolitical control scale (SPCS) has been widely employed to investigate the relationship between the intrapersonal component of psychological empowerment (PE) and citizen participation in public policies and programs in the last few decades.

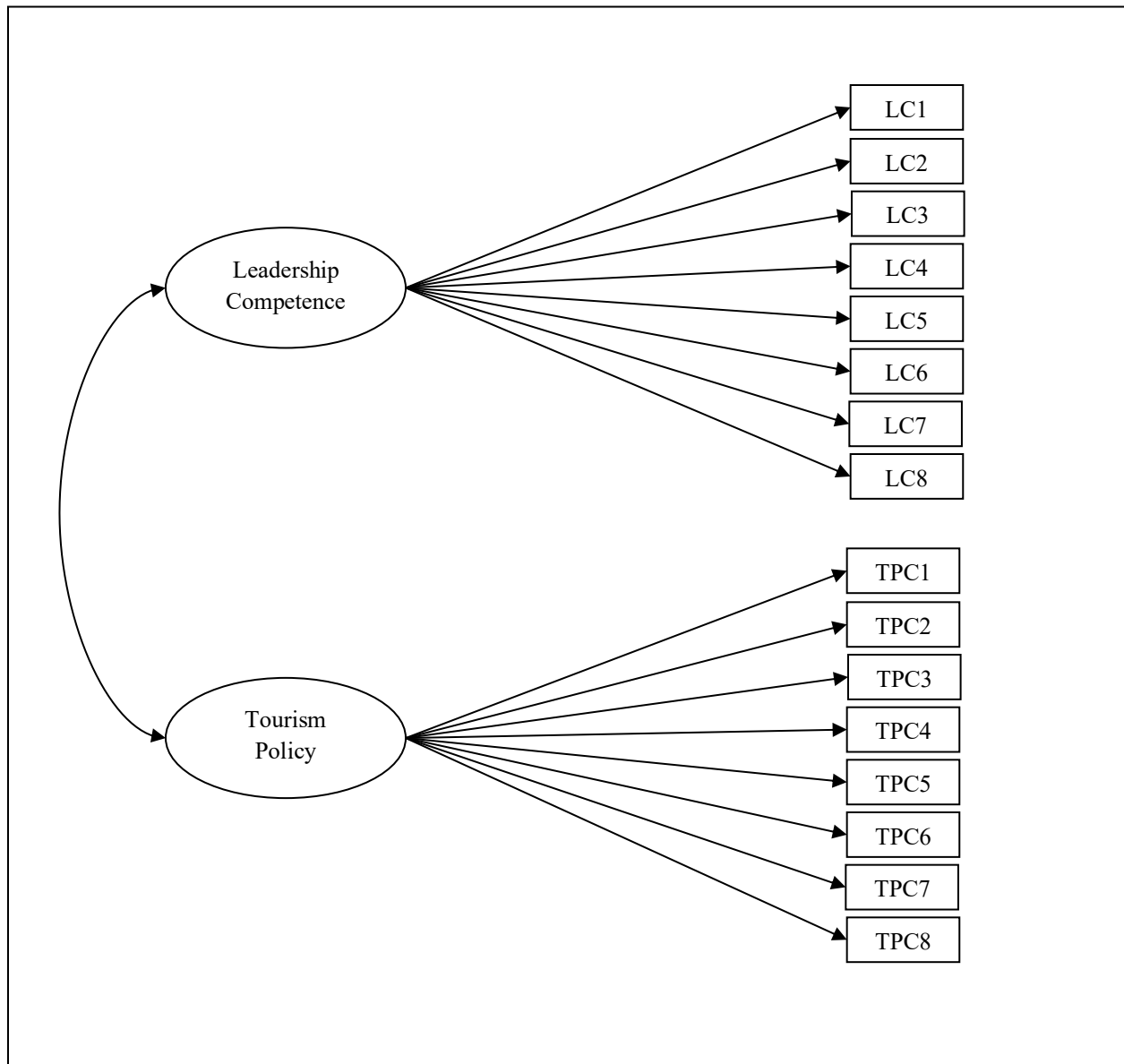
Tourism research has accentuated that individuals who have strong ties to their communities become empowered to take part in policy-making relevant to local-based tourism development

(Blackstock, 2005). Tourism development has also been acknowledged as a leading economic force and has the potential to contribute to the rejuvenation of the economy of nations as well as local communities. Yet, mass tourism is often associated with some negative impacts such as destruction of natural, social, and cultural circumstances of host communities of tourism destinations (Chapman & Speake, 2011). Tourism is a system, of which host communities and tourism development are integral parts, but many impacts of tourism development are mainly evaluated with economically-oriented indices. Social impacts, such as the level of citizen participation and empowerment, represent additional important indicators of successful tourism development. Citizen participation and empowerment are critical factors in the minimization of tension between economic growth and protection of tourism resources. The realization of this concept has encouraged tourism scholars to study the issues of host community involvement and citizen participation in tourism. These two subjects are significantly vital to the overall tourism system because knowing how empowered citizens feel, whether or not they see themselves as participants and or are taking actions to be active participants, should be of broad interest to policymakers. Engaging residents in the planning process can improve the quality of development initiatives and support for tourism policy, creating better experiences at tourism destinations.

In this regard, this study examined whether the SPCS can be modified for use in the tourism domain (SPCS-T) as a valid and reliable quantitative scale to measure individuals' internal status of psychological empowerment toward tourism development. After one item in the tourism policy control (TPC9) was deleted from the full measurement model, CFA results showed evidence of scale reliability. As evidence of construct validity, standardized factor loadings and model fit indices demonstrated that the model fit the recommended requirements for scale

construction. The results also provide discriminant validity by showing sufficient variance in the two dimensions of psychological empowerment, LC and TPC (Said, Badru, & Shahid, 2011). To wit, the SPCS is a robust scale that can be readily adapted to various domains, including tourism, and the SPCS-T scale developed in this study holds much promise for researchers and practitioners who are interested in assessing the outcomes of local residents in tourism policies and programs.

The items of the tourism policy control scale (TPC) of this study were reworded to be appropriate to the tourism domain. The rephrased items of the TPC were found to be problematic in terms of citizens' engagement in local tourism development. One item of the TPC was removed because of its low factor loading, which indicated a possible validity concern. In other words, the study revised the original items of the SPCS for the tourism domain, and was tested in a different sociopolitical setting. It is recommended that future studies more clearly reflect a research area's sociopolitical circumstances in order to develop the SPCS-T as a standardized construct of the intrapersonal component of psychological empowerment toward tourism development. Next, in order to use the SPCS-T as a more generalized construct in the tourism domain, it is necessary for future studies to test the construct across different communities. Lastly, individuals' psychological empowerment is an internal state. As such, it is continuously changing. Hence, research needs to assess individuals' internal change over time. Increasing recognition of longitudinal data has made the importance of the latent growth model (LGM) more appealing and, the LGM will become an effective analytical tool in examining individuals' social and psychological changes temporally. In turn, this will help the SPCS-T maintain and improve its capability for modeling.



Note: LC refers to leadership competence; and TPC represent tourism policy control. The observed variables were tested based on the measurement by employing the factor loadings of the observed variables and their error term. The error term was omitted in this figure.

References

- Assaker, G., & Hallak, R. (2016). Detecting latent classes in tourism data through response-based unit segmentation (REBUS) in PLS-SEM. *Tourism Analysis*, 21(6), 661–668.
- Babbie, E. (2001). *The practice of social science*. Belmont: Wadsworth.
- Bennett, R., Härtel, C. E. J., & McColl-Kennedy, J. R. (2005). Experience as a moderator of involvement and satisfaction on brand loyalty in a business-to-business setting 02-314R. *Industrial Marketing Management*, 34(1), 97–107. doi:10.1016/j.indmarman.2004.08.003
- Biswas, A. (1992). The moderating role of brand familiarity in reference price perceptions. *Journal of Business Research*, 25 (3), 251–262. doi:10.1016/0148-2963(92)90033-8
- Bloom, J. Z. (2005). Market segmentation: A neural network application. *Annals of Tourism Research*, 32(1), 93–111.
- Book, L. A., Tanford, S., & Chen, Y.-S. (2016). Understanding the impact of negative and positive traveler reviews: Social influence and price anchoring effects. *Journal of Travel Research*, 55(8), 993–1007.
- Brida, J. G., Scuderi, R., & Seijas, M. N. (2014). Segmenting cruise passengers visiting uruguay: A factor–cluster analysis. *International Journal of Tourism Research*, 16(3), 209–222.
- Browne, M. W. and R. Cudeck (Eds.) (1993). *Alternative Ways of Assessing Model Fit*. Newbury Park, CA: Sage.
- Carmichael, C. & McCole, D. T. (2015). Understanding motivations of potential partners to develop an outdoor recreation program in an urban area. *Journal of Outdoor Recreation and Tourism*, 7-8, 55-64. DOI: 10.1016/j.jort.2014.09.001
- Chandran, S., & Morwitz, V. G. (2005). Effects of participative pricing on consumers' cognitions and actions: A goal theoretic perspective. *Journal of Consumer Research*, 32(2), 249–259.
- Chen, G., Bao, J., & Huang, S. (2014). Segmenting Chinese backpackers by travel motivations. *International Journal of Tourism Research*, 16(4), 355–367.
- Chua, B.-L., Lee, S., Goh, B., & Han, H. (2015). Impacts of cruise service quality and price on vacationers' cruise experience: Moderating role of price sensitivity. *International Journal of Hospitality Management*, 44, 131–145. doi:10.1016/j.ijhm. 2014.10.012
- Chung, J. Y., Kyle, G. T., Petrick, J. F., & Absher, J. D. (2011). Fairness of prices, user fee policy and willingness to pay among visitors to a national forest. *Tourism Management*, 32(5), 1038–1046. doi:10.1016/j.tourman.2010.08.016
- McCole, D. T., Bobilya, A., Holman, T., Lindley, B. (2019). Benefits of summer camp: What do parents value? *Journal of Outdoor Recreation, Education and Leadership*, 11, 239-247. DOI: 10.18666/JOREL-2019-V11-I3-9672
- Cohen, S. A., Prayag, G., & Moital, M. (2014). Consumer behaviour in tourism: Concepts, influences and opportunities. *Current Issues in Tourism*, 17(10), 872–909. doi:10.1080/13683500.2013.850064
- Chamber, S. (2003). "Deliberative Democratic Theory." *Annual Review of Political Science*, 6: 307-326.
- Chu, K. H. and S. K. Murrman (2006). "Development and Validation of the Hospitality Emotional Labor Scale." *Tourism Management*, 27(6): 1181-1191.
- Cronbach, L. J. (2004). "My Current Thoughts on Coefficient Alpha and Successor Procedures." *Educational and Psychological Measurement*, 64(3): 391-418.

- Culbertson, M. J., McCole, D. T. & McNamara, P. E. (2014). Practical Challenges and Strategies for Randomized Control Trials in Agricultural Extension and Other Development Programs. *Journal of Development Effectiveness*, 6(3), 284-299. DOI: 10.1080/19439342.2014.919339
- Dredge, D. (2006). "Policy Networks and the Local Organisation of Tourism." *Tourism Management*, 27(2): 269-280.
- Fredline, E. and B. Faulkner (2000). "Host Community Reactions: A Cluster Analysis." *Annals of Tourism Research*, 27(3): 763-784.
- Lee, J. .-H., McCole, D., Holecek, D. (2020). Exploring winery visitors in the emerging wine regions of the north central United States. *Sustainability*, 12(4), 1642. DOI: 10.3390/su12041642
- Hechanova, M. R., R. B. A. Alampay, and E. P. Franco (2006). "Psychological Empowerment, Job Satisfaction and Performance among Filipino Service Workers." *Asian Journal of Social Psychology*, 9(1): 72-78.
- Holecek, D., McCole, D. T., & Lee, J. (2016). Tasting Room Visitor Surveys: Experience with and Enjoyment of Cold-Hardy Wines. *The Northern Grapes News*, 5(2), pp. 8-9.
- Hung, K., E. Sirakaya-Turk, and L. J. Ingram (2011). "Testing the Efficacy of an Integrative Model for Community Participation." *Journal of Travel Research*, 50(3): 276-288.
- Jamal, T. B. and D. Getz (1995). "Collaboration Theory and Community Tourism Planning." *Annals of Tourism Research*, 22(1): 186-204.
- Ko, D. and W. P. Stewart (2002). "A Structural Equation Model of Residents' Attitudes for Tourism Development." *Tourism Management*, 23(6): 521-530.
- Liu, Z. (2003). "Sustainable Tourism Development: A Critique." *Journal of Sustainable Tourism*, 11(6): 459-475.
- Malete, L., McCole, D., Tshepang, T., Ocansey, R., Mphela, T., Maro, C., Adamba, C., and Kazi, J. (2019). Effects of a multiport-sport PYD intervention program on life skills and entrepreneurship in youth athletes. *Journal of Sport & Exercise Psychology*, 41(1), 77-88.
- Mason, P. and J. Cheyne (2000). "Residents' Attitudes to Proposed Tourism Development." *Annals of Tourism Research*, 27(2): 391-411.
- Mangion, M.-L., Durbarray, R., & Sinclair, M. T. (2005). Tourism competitiveness: Price and quality tourism competitiveness: Price and quality. *Tourism Economics*, 11(1), 45–68. doi:10.5367/0000000053297202
- Martin, J. M., Lejarraga, T., & Gonzalez, C. (2018). The effects of motivation and memory on the weighting of reference prices. *Journal of Economic Psychology*, 65, 16–25. 2680 B. STANGL ET AL.
- Martin, W. C., Ponder, N., & Lueg, J. E. (2009). Price fairness perceptions and customer loyalty in a retail context. *Journal of Business Research*, 62(6), 588–593. doi:10.1016/j.jbusres.2008.05.017
- Martinetz, T. M., & Schulten, K. J. (1991). A “neural-gas” network learns topologies. In T. Kohonen, K. Mäkisara, O. Simula, & J. Kangas (Eds.), *Artificial neural networks* (pp. 397–402). Amsterdam: North-Holland.
- Masiero, L., & Nicolau, J. L. (2011). Tourism market segmentation based on price sensitivity. *Journal of Travel Research*, 51 (4), 426–435. doi:10.1177/0047287511426339
- Matzler, K., Renzl, B., & Faullant, R. (2007). Dimensions of price satisfaction: A replication and extension. *International Journal of Bank Marketing*, 25(6), 394–405. doi:10.1108/02652320710820345

- Matzler, K., Teichmann, K., Strobl, A., & Partel, M. (2019). The effect of price on word of mouth: First time versus heavy repeat visitors. *Tourism Management*, 70, 453–459.
- Matzler, K., Würtele, A., & Renzl, B. (2006). Dimensions of price satisfaction: A study in the retail banking industry. *International Journal of Bank Marketing*, 24(4), 216–231. doi:10.1108/02652320610671324
- Mayhew, G. E., & Winer, R. S. (1992). An empirical analysis of internal and external reference prices using Scanner data. *Journal of Consumer Research*, 19(1), 62–70. doi:10.2307/2489188
- McCole, D. T., Holecek, D., Eustice, C., & Lee, J., (2018). Understanding wine tourists in emerging wine regions: An examination of tasting room visitors in the Great Lakes region of the U.S. *Tourism Review International*, 22(2), 153-168. DOI: 10.3727/154427218X15319286372306
- Mazanec, J. A. (1992). Classifying tourists into market segments: A neural network approach. *Journal of Travel & Tourism Marketing*, 1(1), 39–60.
- Mazanec, J. A. (2001). Neural market structure analysis: Novel topology-sensitive methodology. *European Journal of Marketing*, 35(7/8), 894–916.
- Mazanec, J. A. (2008). TRN32 for Windows. Retrieved from <http://www.wu.ac.at/itf/downloads/software/trn32>
- Mazanec, J. (1995). Fragebogen Sommer Urlaubsreisende [Summer holidays guest survey]. Vienna: Institut für Tourismus und Freizeitwirtschaft, Wirtschaftsuniversität Wien.
- Mazanec, J. A., Ring, A., Stangl, B., & Teichmann, K. (2010). Usage patterns of advanced analytical methods in tourism research 1988–2008: A six journal survey. *Information Technology & Tourism*, 12(1), 17–46. doi:10.3727/109830510 (12747489979583
- Mazanec, J., & Strasser, H. (2000). A nonparametric approach to perceptions-based market segmentation: Foundations. Berlin: Springer.
- McCole, D. T. & Joppe, M. (2014). The search for meaningful tourism indicators: The case of the International Upper Great Lakes Study. *Journal of Policy Research in Tourism, Leisure and Events*, 6(3), 248-263. DOI: 10.1080/19407963.2013.877471
- Mgxekwa, B., Scholtz, M., & Saayman, M. (2018). So you want to walk in the footsteps of a legend, but what are you willing to pay? The case of The Nelson Mandela heritage sites. *Journal for New Generation Sciences*, 16(1), 79–91.
- Monroe, K. B. (1973). Buyers' subjective perceptions of price. *Journal of Marketing Research*, 10(1), 70–80.
- Ohmer, M. L. (2007). "Citizen Participation in Neighborhood Organizations and Its Relationship to Volunteers' Self- and Collective Efficacy and Sense of Community." *Social Work Research*, 31(2): 109-120.
- Peterson, N. A., J. B. Lowe, L. Aquilino, and J. E. Schneider (2005). "Linking Social Cohesion and Gender to Intrapersonal and Interactional Empowerment: Support and New Implications for Theory." *Journal of Community Psychology*, 33(2): 233-244.
- Peterson, N. A., P. W. Speer, and C. H. Peterson (2011). "Pathways to Empowerment in Substance Abuse Prevention: Citizen Participation, Sense of Community, and Police Responsiveness in an Urban U.S. Setting." *Global Journal of Community Psychology Practice*, 1(3): 23-31.
- Popp, L. (2013). Understanding the push and pull motivations and itinerary patterns of wine tourists. Master's Thesis. Michigan State University

- Rapport, J. M. (Ed.). (1984). Studies in Empowerment: Introduction to the Issues. New York: Haworth Press.
- Said, H., B. B. Badru, and M. Shahid (2011). "Confirmatory Factor Analysis (CFA) for Testing Validity and Reliability Instrument in the Study of Education." *Australian Journal of Basic and Applied Sciences*, 5(12): 1098-1103.
- McCole, D. T. & Vogt, C., (2011). Informing sustainability decisions: The role of parks, recreation, and tourism scholars in addressing unsustainability. *Journal of Park and Recreation Administration*. 29(3), 38-54.
- Simpson, M. (2008). "Community Benefit Tourism Initiative- A Conceptual Oxymoron?" *Tourism Management*, 29: 1-18.
- Thronthike, R. M. and T. Thronthike-Christ (2010). Measurement and Evaluation in Psychology and Education (8 ed.). Boston, MA: Pearson.
- Ungar, M. (2004). "A Constructionist Discourse on Resilience: Multiple Contexts, Multiple Reality among At-Risk Children and Youth." *Youth & Society*, 35(3): 341-365.
- Wearing, S. and M. McDonald (2002). "The Development of Community-Based Tourism: Re-Thinking the Relationship Between Tour Operators and Development Agents as Intermediaries in Rural and Isolated Area Communities." *Journal of Sustainable Tourism*, 10(3): 191-206.
- Yates, G. E., T. V. Stein and M. S. Wyman (2010). "Factors for Collaboration in Florida's Tourism Resources: Shifting Gears from Participatory Planning to Community-Based Management." *Landscape and Urban Planning*, 97: 213-220.
- Zimmerman, M. A. (1990). "Taking Aim on Empowerment Research: On the Distinction between Individual and Psychological Conceptions." *American Journal of Community Psychology*, 18(1): 169-177.
- Zimmerman, M. A. and J. Rapport (1988). "Citizen Participation, Perceived Control, and Psychological Empowerment." *American Journal of Community Psychology*, 16(5): 725-750.
- Zimmerman, M. A. and J. H. Zahniser (1991). "Refinements of Sphere-Specific Measures of Perceived Control: Development of a sociopolitical control scale." *Journal of Community Psychology*, 19: 189-204.